

COMBINED FINGERPRINT ACQUISITION AND CONTROL DEVICE

ABSTRACT OF THE DISCLOSURE

5 The present invention combines the functionality of a computer pointing device with a fingerprint authentication system. In the preferred embodiment, by regularly scanning fingerprints acquired from the pointing device touch pad, fingerprint features may be extracted and compared to stored data on authorized users for passive authentication. Furthermore, calculations based upon the acquired fingerprint images and associated
10 features allows the system to determine six degrees of freedom of the finger, allowing the user to control a variety of functions or to manipulate a three-dimensional model or virtual reality system.